

Rawer, Karl.
ACTIVE HIGH FREQUENCY SPECTROMETER FOR
IONOSPHERIC SOUNDINGS. II. SELECTION OF ECHO
SIGNALS IN THE PRESENCE OF NOISE [Aktive Hoch-
frequenz Spektrometer für Ionosphärische Echolotung.
II. Selektion der Echozeichen aus dem Störpegel] tr. by
I. M. Sprecher. Nov 60 [12]p.
Order from OTS or SLA \$1.60

62-24058

Trans. of Archiv der Elektrischen Übertragung (West
Germany) 1960, v. 14, p. 373-379.

DESCRIPTORS: *High frequency, *Spectrum analyzers,
*Atmospheric sounding, *Ionosphere, *Noise, *Echo
ranging, *Angle of arrival, Radio reception.

(See also 62-24059)

(Earth Sciences--Atmosphere, TT, v. 9, no. 10)

62-24058

- I. Rawer, K.
- II. Title: Selection ...
- III. Title: Selektion ...
- IV. National Bureau of
Standards, Boulder,
Colo.

4-30-62

Office of Technical Services

On the Generation of Spurious Modes in Wave
Guides Transitions, by K. Schnetzler.
GERMAN, per, A.E.U., Vol 14, No 10, 1960,
pp 425-431.
NLL Ref:5207 (14b Trans 1341)

Sci-Phys
Feb 70

401,529

Ulbrich, E. and Piloty, H.

THE DESIGN OF ALL-PASS, LOW-PASS, AND BAND-PASS NETWORKS WITH A CONSTANT GROUP DELAY WHICH IS APPROXIMATED IN THE TSCHEBYCHEFF SENSE. [1961] 33p.

Order from ATS \$35.45

ATS-02N54G

Trans. of Arch[iv der] Elektr[ischen] Übertr[agung]
(West Germany) 1960, v. 14, no. 10, p. 451-457.

DESCRIPTORS: *Electrical networks, Design.

(Engineering--Electrical, TT, v. 7, no. 4)

61-25658

I. Title: Tschebycheff sense

I. Ulbrich, E.

II. Piloty, H.

III. ATS-02N54G

IV. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

New Distribution Function for the Telephone Traffic
in Complete Connecting Arrangements, by H. Wagner.

GERMAN, per, Archiv der Elektrischen Übertragung,
Vol LIV, 1960, pp 508-514.

GB/110 in P.O./ 378

Sci
Jun 63

61-20525

Heynisch, Hinrich.
THE RESONANT BACKWARD-WAVE OSCILLATOR,
A GENERATOR OF MICROWAVES. [1961] 13p.
9 refs.

Order from SLA \$1.60

61-20525

Trans. of Arch[iv der] Elek[trischen] Übertragung
(West Germany) 1960, v. 14, no. 12, p. 531-538.
Another trans. is available from ATS \$16.65 as
ATS-21N53G [1961] 13p.

DESCRIPTORS: *Backward-wave oscillators,
Resonance, Operation, Electrical properties,
*Microwaves, Generators, Oscillators.

(Engineering--Electronic, TT, v. 7, no. 2)

I. Heynisch, H.

Office of Technical Services

A Filter System with Favorable Pulse
Properties, by Karl Uhl.
GERMAN, per, Arch. d. Elektr. Übertragung.
Vol 13, No 3, pp 109-114, 1961 9229614
AEC ORNL-Tr-528

Sci-Elec
Nov 65

290,662

Schonfelder, Helmut.

**SIGNAL DISTORTION IN TELEVISION SYSTEMS
EMPLOYING AN FM-MODULATED SUBCARRIER.**

12 Dec 61, 21p.

Order from SLA \$2.60

62-10450

Trans. of Archiv der Elektrischen Übertragung (West
Germany) 1961, v. 15, no. 10, p. 273-284.

DESCRIPTORS: Television communication systems,
Color television systems, *Video signals, Distortion,
Frequency modulation, Modulation

In television systems using frequency-modulated sub-
carriers, it is expedient for the purpose of calculating
the frequency-modulated transient response to approxi-
mate the transmission characteristic by an ideal rec-
tangular filter. The analysis for the ideal frequency
step for a symmetrical pass-band with constant delay
(Engineering--Electronic, TT, v. 7, no. 8) (over)

62-10450

1. Schonfelder, H.

CIA/FDD XX-1212
NOT RELEASABLE TO
FOREIGN NATIONALS
USIB INTERNAL USE
ONLY

Office of Technical Services

Tunnel Diode Rectilinear Amplifier Low
Level Noise Input Stage in the UHF Region,
by H. Rieck, R. Maurer, 24 pp.

GERMAN, per, Archiv der Elektrischen
Uebertragung, Vol XV, No 11, 1961,
pp 495-507.

ACSI X-3616
ID 2250321

Sci - Phys, Electron
Jan 64

248,819

Transfer Factors With the Tschebyscheff Approximation
of Constant Envelope Delay, by Thomas-Alfred Aßbele,
18 pp.

GERMAN, per, Archiv der Elektrischen Übertragung,
Vol. XVI, No 1, 1962, pp 9-18. 9226605
AEC-ORNL-Tr-324

Sci-Electr
Jan 65

272,469

The Noise in Transister Mixers, by J. S. Vogel
and M. J. O. Strutt,
GERMAN, per, Archiv der Elektrischen Übertra-
gung, Vol XVI, No 5, May 1962.
Army Mat Cmd
SSFC TR 01-66

Sci-Electr & Elct Engr
Mar 67

320,173

Characteristic Matrices of the Basic Transistor
Circuit, by Gert Marte, 11 pp.
GERMAN, per, Archiv der Elektrischen Uebertragung,
Vol XVI, No 7, 1962, pp 343-346. 9692210
DDC RSIC-126

Sci - Phys
Apr 64

253,728

TT-65-12222

Field 20C

Kessler, A.; Vicek, A.; Zinke, O.
METHODS OF CALCULATING CAPACITANCES WITH
PARTICULAR CONSIDERATION OF THE SUBDIVIDED
SURFACE AREA METHOD. 40p, 13refs.
Order from SLA: \$3.60 as TT-65-12222

Trans. of Archiv der Elektrischen Uebertragung (West
Germany) v16 n8 p365-80 1962.

I. Kessler, A.
II. Vicek, A.
III. Zinke, O.

MR 627

Survey of Electroacoustic Transducers by Means of
Linking Matrices, by Erwin Martin, 14 pp.
GERMAN, per, Archiv der Elektrischen Uebertragung,
Vol XVI, 1962, pp 600-608.
Navy Tr 3775/
USRL 41

Sci - Electron
May 64

256,963

Butterweck, Hans-Jürgen.
THE Y CIRCULATOR. [1963] 54p 22refs
Order from SLA \$5.60 TT-64-14634

Trans. of [Archiv der Elektrischen Übertragung] (West Germany) 1963, v. 17, p. 163-176. (Abstract available)

DESCRIPTORS: *Microwave equipment, *Waveguides, Scattering, Field theory.

Under the condition that losses are absent, the paper derives statements concerning the magnitudes of the scattering matrix elements for the Y-circulator which has lately found many applications. A field-theoretical analysis is carried out for a waveguide Y-circulator under some simplifying assumptions. The circulator effect can accordingly be explained by interference of two rotary E_{110} -fields in the circular-cylindrical cavity. (Author)
(Engineering--Electronic, TT, v. 11, no. 11)

TT-64-14634

1. Title: Waveguide circulators
2. Title: Y circulators
1. Butterweck, H. -J.

Office of Technical Services

Oscillation Type Spectrum in the He-Ne Gas Laser,
by D. Rosenberger, 7 pp.
GERMAN, per, Archiv der Elektrischen Übertragung,
Vol XVII, 1963, pp 202-204. 9695951
Amer Meteorol Soc
T-G-216

Sci - Phys
Mar 65

275,052

TT-64-16585

Heynisch, Hinrich.
WAVE PROPAGATION ALONG A HELICAL LINE:
NOTES ON THE PROPAGATION OF MICRO WAVES
AND LONGER WAVES ALONG A HELICAL LINE
PROVIDED WITH A DIELECTRIC SUPPORT AND A
COAXIAL OUTER CONDUCTOR. 18p 8refs
Order from SLA \$1.60 TT-64-16585

Trans. of Archiv der Elektrischen Übertragung
(West Germany) 1963, v. 17 [no. 5] p. 254-260.

I. Heynisch, H.
II. Title: Propagation...

(Engineering--Electronic, TT, v. 12, no. 3)

Office of Technical Services

TT-65-12311

Field 20F

Grau, G.
THERMAL AND LASER RADIATION AS INFORMATION
CARRIERS. 9p, 7refs.
Order from SLA: \$1.10 as TT-65-12311

Trans of Archiv der Elektrischen Uebertragung (West
Germany) v18 n1 p1-4 1964.

I. Grau, G.

MR 630

TT-65-12221

Field 9C

Borchert, L.; Rau, K. L.
THE PARAMETERS OF INDUCTIVE LOAD CIRCUITS
WHICH DETERMINE THE LIFE OF CONTACTS. 20p.
5refs.
Order from SLA: \$1.60 as TT-65-12221

Trans. of Archiv der Elektrischen Uebertragung (West
Germany) v18 n1 p60-6 1964.

I. Borchert, L.
II. Rau, K. L.

MR 627

The Orthogonal Multiplexing as a
Generalization of Time and Frequency
Multiplexing, by H. Harmuth, 20 pp.
GSI-AN, per, Archiv der Elektrischen
Übertragung, Vol XVIII, No 2, 1964,
pp 43-50. 9227089
ABC-54-T-65700

Sci-Engr
Apr 65

277,079

Calculation of Fabry-Perot Laser Resonators by
Scattering Matrices, by Detlef Gloge, 19 pp.
GERMAN, per, Arch. der Elektrischen Übertragung,
Vol 18, No 3, 1964, pp 197-203.
ARM/RSIC/Tr-845-68
GOVERNMENT USE ONLY

Sci/Phy
Dec 68

354,944

Calculation of the Stability of a Shift Register with
Rectangular Ferrites as Storage, by H. Stegmeir,
R. Zacherpel, 9 pp.
GERMAN, per, Archiv der Elektrischen Übertragung,
No 4, 1964, pp 249-254.
ACSI I-5761
ID 2204047964

Sci - Phys; Elec
Mar 65

276,967

Calculation of the Transmission Properties
of Symmetrical Lines Allowing for the
Effect of the Twist Pattern, by Horst-
Egger Martin, 95 pp.
GEMAN, per, Archiv der Elektrischen
Ingenieurwesen, Vol 18, No 5, 1964, pp 293-308.
SIA 11-85-10434

338,880

66, 67

Logarithmic Line-Diagram, by O. Zinke.
GERMAN, per Arch.elekt. Uebetr. Vol. 18, No. 6, 1964,
pp 331-335
PMG/ENG

Sci -
Aug 67

339-545

Concentration of Coherent Light Beams by a
Position-Dependent Dielectric, by D. Gloge,
6 pp.
GERMAN, per, Archiv der Elektrischen Uebertragung,
Vol 18, No 7, 1964, pp 451-452.
ARM/RSIC/Tr-835-68
GOVERNMENT USE ONLY

Sci/Elec
Dec 68

354,953

The Grooved Guide, by D. Schick, W. Schlosser.
GERMANY, per, Archiv Elektrischen Übertragung,
Vol XVIII, No 8, 1964, pp 481-485.
NASA TT F-9296

SCI-BLOCK

Jun 64

U.S. GOVERNMENT ONLY

281,041

Effect of the Mass of the Electrodes on the
Vibration of Thin Vibrating Crystal Plates, by
G. Sauerbrey, 20 pp.

GERMAN, per, Archiv Elektrischen Uebertragung,
Vol 18, No 10, 1964, pp 617-624.

ARM/RSIC-1024-70

GOVERNMENT USE ONLY

NTC 72-11202-20C

Amplitude Distribution and Electrical Equivalent
Data of Vibrating Crystal Plates (At-CUT), 13 pp.
GERMAN, per, Archiv Elektrischen Uebertragung,
Vol 18, No 10, 1964, pp 624-628.
ARM/RSIC-1025-70
GOVERNMENT USE ONLY

Sci/Elec
Nov 70

Response Factors of Electroacoustic Transducers,
by Erwin Martin,
GERMAN, per, Archiv der Elektrischen Übertra-
gung, Vol 18, 1964, pp 732-742. P500144567
Dept of Navy NRL tr 1093

Copyright
Sci/Electronics
Jun 67

327,590

NCH-201 924

Field 9D

Kersten, R.
QUANTIZATION NOISES IN PULSE CODE MODULATION
WITH INACCURATELY OPERATING APPARATUS FOR
ENCODING AND DECODING. 1965, 13p, 7 refs.
POED-Trans-2008.
Order from NLL

Trans. of Archiv der Elektrischen Uebertragung
(West Germany) v19 n2 p112-6 1965.

I. Post Office Research
Station, London (England)

Archiv der Elektrischen Übertragung

1966 V20 P581-598	70-12218-20F <*
1967 V21 P585-598	70-12219-20F <*
1968 V22 N10 P591-600	70-10691-09C <*
1968 V22 N12 P583-598	70-10480-28A <*

Order from NTC

Anodic Dissolutions of Iron, by
K. F. Bonhoeffer, K. E. Heusler,
GERMAN, per, A. fur Elektrochemie,
Vol 61, No 1, 1957, pp 122-125.
*DISI 4036

Sci-M/M
May 65

279,451

ARCHIV FUER ELEKTROTECHNIK

1913 V2 N2 P57	70-21983 <*>
1913 V2 N4 P155-166	70-22104 <*>
1920 V9 P365-390	70-21788 <*>
1923 V12 P160-203	70-21905 <*>
1924 V13 P441-459	70-21879 <*>
1927 V18 P283-327	70-21831 <*>
1928 V20 P697-618	70-21878 <*>
1940 V34 N5 P293-300	70-21377 <*>
1956 V42 N7 P398-409	70-23499 <*>
1959 V44 N5 P306-317	70-22835 <*>

order from NTC

Wagner, Karl Willy.
THE EXPLANATION OF THE DIELECTRIC "AFTER-
EFFECT" PROCESS ON THE BASIS OF THE IDEAS
OF MAXWELL. [1964] 20p (figs formulae omitted)
15refs

Order from SLA \$1.60

TT-64-10995

Trans. of Archiv für Elektrotechnik (Germany) 1914,
v. 2, no. 9, p. 371-387.

(Physics--Electricity, TT, v. 11, no. 12)

TT-64-10995

L. Wagner, K. W.

Office of Technical Services

Determination of the Magnetic Induction of Heusler
Alloys With High Frequencies, by H. Fassbender, 29 pp

GERMAN, per, Arch Elektrotech, Vol II, No 11, 1914.

SLA 57-1396

Sci
May 58

63,771

Transient Phenomena in Short Circuits of Commutator
Machines, by J. Biermanns, 17 pp. UNCLASSIFIED

GERMAN, per, Archiv fur Elektrotechnik, Vol VII,
No 1, 1918.

Navy Tr 148/NRL 292

Scientific - Electricity

June CTS

14,959

Natural Oscillations in Alternating-Current Coils,
by O. Bohm, 35 pp.

GERMAN, per, Arch Elektrotech, Vol IX, 8 Dec 1920,
pp 341-361.

S.L.A. Tr 57-336

Sci - Electricity
May 57

48, 733

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p.

The Electric Strength at the Edge of the Flat
Condenser, by W. Rogowski, 26 pp.

GERMAN, per, Arch Elektrotech, Vol XII, No 1,
1923, pp 1-15.

ABC SCL-T-345

Sci - Engr
Jul 61

157,438

The Calculation of the Magnetic Leakage Coefficient σ
Its Effect Upon the Action f_m of a Two-Winding A.C.
Transformer and the Calculation of the Impedance
Diagram, by P. Andronescu, 24 pp.

GERMAN, per, Arch Elektrotech, Vol XII, 10 Mar 1923,
pp 25-37.

SLA 57-2222

Sci
May 58

63,268

Localizing Faults in Open Lines, Especially in
Case of Wire Theft, by R. Fiedler, 44 pp.

GERMAN, per, Arch Elektrotech., Vol XII, 1923,
pp 101-120.

SLA Tr 57-1124

Sci - Electronics
Jan 58

57,615

A Cathode Ray Oscillograph for Vacuum Recording, by
W. Rogowski, E. Flegler, 18 pp.

GERMAN, per, Arch Electrotech. Vol XV, No 4, 5 Dec
1925, pp 297-303.

SLA 57-964

Sci - Electron

Feb 58

58, 233

Disc Currents in Alternating Fields, by K. Bauer,
29 pp.

GERMAN, per, Arch Elektrotech, Vol XVI, No 1,
1926, pp 58-72.

SLA Tr 57-1551

Sci - Electricity

54, 503

Oct 57

The Breakdown Field Intensity of Air With Plane
Electrodes Having Correct and Incorrect Shaping of
Edges, by H. Bengler, 42 pp.

GERMAN, per, Arch Elektrotech, No 16, 1926, pp 76-96.

ABC-SOL-Tr-466

Sci - Nucl Sci

Jul 63

238, 216

Direct-Current Generator Free From Harmonics.
Telephone Machine, by K. Hammers, 43 pp.

GERMAN, per, Arch Electrotech, Vol. XVII, No 3,
25 Oct 1926, pp 262-280.

SLA 58-193

Sci

Aug 59

94,055

Schenfer, Claudius and Aparoff, B.
EXPERIMENTAL INVESTIGATION OF THE COM-
MUTATION IN DIRECT CURRENT MACHINES.
[1961] [10]p.

Order from SLA \$1. 10 62-10763

Trans. of Archiv für Elektrotechnik (Germany) 1927,
v. 18, no. 5, p. 475-478.

DESCRIPTORS: Direct current, Machines, Commuta-
tors, Brushes

(Unannounced)

62-10763

I. Schenfer, C.
II. Aparoff, B.

Office of Technical Services

The Mode of Operation of the Concentrating
Coil in the Braun Tube, by J. H. Busch, 31 pp.

FRENCH, per, Arch. Electrot, Vol XVIII, No 6,
1927, p 583.

S.L.A. Tr 57-32

Sci - Engineering
Apr 57

47,374

The Magnetic Field Strength in the Plane of a
Circular Area Around Which Current Is Flowing,
by L. Fleischmann, 12 pp.

GERMAN, per, Arch Elektrotech, Vol XXI, No 1,
22 Oct 1928, pp 30-34.

SIA 57-2378

May 58

63,227

On a New Principle for the Production of Higher
Voltages, by B. Wilderbe. ? (*Ref Wilderbe*)

Full translation.

GERMAN, per, Archiv fur Elektro technik, Vol 21,
1928, pp 387-406.

AEC Tr 1237

TPA3/TIB-T-4448

Scientific - Electricity

SLA 57-1759

Oscillographs of Currents in Insulating Materials,
by A. Gensant, 12 p.

GERMAN, per, Arch fur Elektrotech, 1930, Vol XXIII,
No 6, pp 683-694.

SLA 59-20453

Sci
Mar 60
Vol 2, No 12

109, 101

B. van der Pol's "Taking Along" Theory, by A.
Andronow, A. Witt, 24 pp.

GERMAN, per, Arch Elektrotech, Vol XXIV, No 1,
28 Jun 1930, pp 99-120.

SLA Tr 57-1102

Sci - Mathematics

52, 3/2.

Aug 57

Investigations of Condenser Transformer, by
A. Gemant, 13 pp.

GERMAN, Per, Archiv fur Elektrotechnik, 1930,
Vol. XXIII, No 6, pp 695-706.

SLA 59-15639

Sci
Nov 59
Vol 2, No 3

100,950

Gas Concentration of Electron Beams,
by W. Rogowski and H. Graupner
GERMAN, per, Archiv. fur Elektrotechnik,
Vol. 26, pp. 807-810 (1932)
O.A./Trans.-1044

FEB 71

Electrical Strength of Mechanically Stressed
Insulating Materials, by T. Akahira, A. Gemant,

GERMAN, per, Arch Elektrotech, Vol XXVII, 1933,
pp 577-585. 9093488

ARC SCL-T-405

Sci - Electricity
Jun 62
List 69

197,824

On the Distortion of the Voltage Curve Due to
Electric Stress of Cable Paper and Its Importance
in Long Telephone Cables, by R. Bauer, 28 pp.

GERMAN, per, Arch Elektrotech, Vol XXVIII, No 5,
1934, pp 274-283.

SLA Tr 57-632

Sci - Electricity

50,715

Aug 57

On the Spark Lag in Oil With Small Electrode Spacing,
by R. Strigel

GERMANY, per, Arch Elektrotech, Vol XXVIII, ~~1934~~ 1934,
pp 671-688.

Nat'l Res Council Canada TR 173

Scientific - Electronics
Jul CTS/DEX Price 0.50

16,574

Investigations of the Physical Processes
in Electrofiltering, by G. Mierdel, 24 pp.
UNCLASSIFIED

GERMAN, per, Archiv f. Elektrotechnik, Vol XXIX,
No 3, 1935, pp 149-172.

Navy Tr 1074/MRL 494

19, 681

54
Nov CTS

Scientific - Physics, Electricity

Calculation of the Leakage ϕ Field of a Condenser
Whose Field is Limited by a Diaphragm, by R. Her-
zog.

GERMAN, per, Arch Elektrotech, Vol XXIX, 1935, pp
790-802.

ASLIB-CB-43

Sci

71,024

Aug 58

Sensitive Cold Cathode Oscillograph of High Output
for Low Exciting Voltages, by E. Westernmann, 16 p.

GERMAN, par, Arch fur Elektrotechnik, 1936, Vol XXX,
No 2, pp 109-122.

SLA 59-20448

Sci
Mar 60
Vol 3, No 1

110,905

The Alternating Field in Saturated Massive
Iron, by G. Haberland, F. Haberland.
GERMAN, per, Arch. für Elektrotechnik.
Vol 30, pp 126-133, 1936 9229632
AEC AK-Tr-83

Sci-Elec
Nov 65

291,942

Determination of the Ballistic Demagnetisation
Factor by Means of the Magnetic Potentiometer for
Bars of Square - Section, by K. Warmuth, 28 pp.

GERMAN, per, Archiv fur Elektrotechnik, Vol XXX,
No 12, 1936, pp 761-779.

28,627

CIA/FDD/Z-181

Scientific - Electronics

Nov 55 CTS/DEX

On a Controllable Cold Cathode Oscillograph Operated with an Auxiliary Discharge, by F. A. Becker, 25 pp.

GERMAN, par, Arch Elektrotech, Vol XXX, 21 Dec 1936, pp 791-799.

SLA Tr 57-2158

Sci - Elec Engr

Jul 58

67,887

Measuring Dividers for Surge (Pulse) and
Voltages, Part II. The Capacitance Divider,
by Wilhelm Rucke, 25 pp.

OSWALD, per, Arch Elektrotech, Vol XXXI, 1937,
pp 732-743.

ABC SCI-T-341

Sci - Electron
May 61

150,875

Theoretical Investigation of the Direct-Voltage
Corona in a Coaxial Cylinder Field, by H. Prinz.

GERMAN, per, Archiv fur Elektrotechnik, Vol XXXI,
1957, pp 756-766.

Dept of Interior
EW 7 257 No 602

Sci - Electronics

Jan 63

219,236

On the Heating of Punctiform Contacts at Constant
Current Load, by A. Avramescu, 24 pp.

GERMAN, per, Arch Elektrotech., Vol XXXIII, No 4,
1939, pp 261-268.

SIA Tr 57-67

Sci - Electricity

50,665

Aug 57

The Ballistic Demagnetisation Factor of
Cylindrical Bars, by K. Warmuth, ~~1955~~ 19 pp.

GERMAN, per, Archiv fur Elektrotechnik, Vol XXXII,^I
1939, pp 747-763.

28,626

CIA/FDD/Z-180

Scientific - Electronics

Nov 55 CTS/DEX

High-Power Oscillographs With Sealed-Off Braun
Tube, by B. Borries, E. Ruska, 25 pp.

GERMAN, per, Arch Elektrotech, Vol XXXIV, No 2,
10 Feb 1940, pp 106-114.

SLA Tr 57-314.

Sci - Electronics

53,091

Sep 57

An Investigation of the Condenser-Welding Process for the Purpose of Obtaining High Tensile Strength of the Welded Joint in Hard-Drawn Aluminum Wires, by G. Bohme, 50 pp.

GERMAN, per, Arch Elektrotech, Vol XXXIV, No 8, 1940, pp 425-445. (loan copy only)

SLA 57-2772

Sci
Aug 58

70 766

Latent Results in the Theory of Linear Networks, by
W. Cauer, 25 pp.

GERMAN, per, Arch Elektrotech, Vol XXXIV, No 12,
1940, pp 689-700.

SLA Tr 57-974

Sci - Electronics
Jan 58

57,446

Zinke, Otto.
**FUNDAMENTALS OF THE DISTRIBUTION OF
CURRENT AND VOLTAGE ON ANTENNAS. [1963]**
[41p] 9refs
Order from SLA \$4.60 TT-63-20356

Trans. of Archiv für Elektrotechnik (Germany) 1941,
v. 35, p. 87-94.

DESCRIPTORS: *Antenna radiation patterns, Antennas,
Electric currents, Electric potential, Distribution,
Partial differential equations, Vector analysis,
Electrical impedance, Electromagnetic waves.

After reducing the field variables $\vec{E}$ and $\vec{H}$ to the vector
potential $\vec{V}$ and a scalar potential ϕ , the transmission
equations of the radiating antenna are derived in exact
form and compared to the usual theory of two-wire
transmission lines. Based on the ratio of the vector
(Engineering--Electronic, TT, v. 11, no. 1) (over)

TT-63-20356

I. Zinke, O.

Office of Technical Services

62-18610

I. Ruhle, F.

Ruhle, F.
BREAKDOWN STRENGTH OF MIXTURES OF DIELECTRIC LIQUIDS. 18 Mar 49, 12p. (figs. tables omitted) 7 refs.

Order from SLA \$1.60

62-18610

Trans. of Archiv f[ur] Elektrotechnik (Germany) 1941 [v. 35, no. 8] p. 490-501.

DESCRIPTORS: *Liquids, Dielectric properties, Mixtures, Electrochemistry, *Dielectrics.

Measurements of breakdown strength of mixtures of dielectric liquids are reported. Studies were conducted on some saturated hydrocarbons, aromatic hydrocarbons and their halogen derivatives as well as various mineral oils. The tests were performed with 50 cycle, a.c. (Author)

(Chemistry--Physical, TT, v. 9, no. 7)

Office of Technical Services

The High-Voltage Potential Divider for Cathode Ray
Oscillographs, by H. Hohl, 20 pp.

GERMAN, per, Arch Elektrotech, Vol. XXXV, No 11,
1941, pp 663-671.

SLA 57-2326

May 58

94A NR2-21331

63,203

On D-C Polarized A-C Choke Coils and Their Reaction,
by T. Buchhold, 47 pp.

GERMAN, per, Arch Elektrotech, Vol XXVI, No 4,
30 Apr 1942, pp 221-238.

SLA Tr 57-2264

Sci

Aug 58

68, 670

Theory of the Magnetic Field,
27 pp, by L. Kneissler-Maidorf.

GERMAN, per, Archiv fur Elektrotechnik, Vol
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VORTEX CURRENT. [1963] 30p
Order from SLA \$2.60

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Trans. of Archiv für Elektrotechnik (West Germany)
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DESCRIPTORS: *Flywheels, *Magnetic brakes, Brakes,
Heat transfer, Design, Effectiveness,

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No 4, 1959, pp 595-615.

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15p. (1 table 10 figs. formulae omitted).
Order from SLA \$1.60

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v. 39, no. 5, p. 327-340.

DESCRIPTORS: *Electronic equipment, *Magnets,
Magnetic materials, Magnetic properties, Structures,
Circuits.

(Physics--Magnetism, TT, v. 8, no. 9)

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Realization of Linear Two-Terminal Circuits- I and
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Calculation of High-Frequency Amplifier Circuits With
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by W. Cauer, 24 pp.

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Scientific - Electronics, broadcast bands, High
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I. Breitling, W.

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A GRAPHIC METHOD FOR THE DETERMINATION OF
THE MOST FAVORABLE OPERATING POINT OF
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figs. omitted).

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DESCRIPTORS: *Magnets, Magnetic fields,
Statistical analysis.

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(figs. formulae tables refs. omitted).
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DESCRIPTORS: *Circuits, *Wiring diagrams,
Mathematical analysis, Voltage.

There is shown a way for the joint calculation of a periodical impulse waves which are produced by a CLR circuit or a combined CR circuit (without L). The clarity there is achieved by the introduction of a new coefficient of the aperiodicity. For those analytical functions whose numerical evaluation can only be carried out in a time-consuming manner or not directly, there have been constructed auxiliary curves. Finally, the calculating procedure is illustrated with the help of some practical examples. (Author)

1. Salka, O.

(Engineering--Electrical,
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The Underwater Spark as an Acoustic Impulse Source,
by H. Drubba, H. H. Rust, 18 pp.
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H. V. Transformer, by J. Vitins.

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No 6, 1954, pp. ~~301~~ ³⁰² 301-312.

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Strutt, S. F. Sun, 11 pp. UNCL

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Sci - Electronics
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Tangential Field Strength in Iron by Means of the
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Sci - Physics
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THE BEHAVIOR OF THE ELECTRIC ARC IN A
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BLOWING). [1962] 67p. 105 refs.
Order from SLA \$6.60

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Trans. of Archiv. für Elektrotechnik (Germany) 1957,
v. 43, no. 2, p. 94-114.

DESCRIPTORS: *Electric arcs, *Magnetic fields,
*Plasma physics, Switches, Rectifiers, Aeronautics,
Cathodes, Hall effect, Statics, Dynamics, Bibliography.

The behavior of the electric arc in a transverse magnetic
field is described in the light of previous publications
and, above all, on the basis of comprehensive personal
investigations. Not only are the physical data to be
covered as accurately as possible, but also all essential
information on the magnetic blowing which is frequently
used in the construction of switch gear is to be given to
(Physics--Electricity, TT, v. 9, no. 5) (over)

I. Eidinger, A.
II. Rieder, W.

Office of Technical Services

The Hall Generator as a Four Pole,
by F. Kuhrt, W. Hartel
GERMAN, per, Archiv fuer Elektrotechnik,
Vo. 43, No 1, 1957, pp. 1-15.
NTC 69-10616-09C

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61-18368

Möltgen, Gottfried.
THE REACTIVE POWER OF THREE-PHASE CURRENT
CONVERTERS WITH UNSYMMETRICAL CONTROL.
1958 [28]p. (5 refs. omitted).
Order from SLA \$2.60

61-18368

Trans. of Archiv für Elektrotechnik (Germany) 1959,
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DESCRIPTORS: *Current regulators, Phase trans-
formers, Voltage, Electric currents, Direct current,
Control.

A short explanation of the principle of unsymmetric con-
trol is followed, first, by the calculation of the re-
active control power, and then by the derivation of the
sum of control and commutating reactive power for the
unsymmetrical control range. (Author)

(Engineering--Electrical, TT, v. 7, no. 10)

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Field Distribution and Specific Braking Force in
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MIPR AS-101 (6-14(1)

18 Nov 65

Überden Einfluß des Laufschienenfeldes auf die
Anbildung und Bewegung von Lichtbogenfahspunkten

By: Dirk Heese, Darmstadt

From: ARCHIV FÜR ELEKTROTECHNIK W. 45 #3(1959):

188-207

(20 pp)

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captions at the end. But do include all formulas and
tables.